

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

Hazard mitigation is the use of long- and short-term strategies to reduce or alleviate death, injury and property damage that can result from a natural disaster. It is impossible to predict exactly when and where disasters will occur or the extent to which they will impact an area. However, with careful planning and collaboration among public agencies, stakeholders and citizens, it is possible to minimize losses due to disasters. The responsibility for hazard mitigation lies with many, including private property owners; business and industry; and local, state and federal government.

The Disaster Mitigation Act (DMA) is federal legislation that encourages state and local authorities to plan for disasters before they occur. The DMA requires proactive pre-disaster planning as a prerequisite for certain types of federal financial assistance. It promotes “sustainable hazard mitigation,” which recognizes that hazard mitigation must be understood in the largest possible context and must include the sound management of natural resources, along with local economic and social resiliency.

To reduce future loss of life and property resulting from disasters, the City of Covington has developed a hazard mitigation plan in compliance with the DMA. The plan outlines planning efforts, policy changes, programs, projects, and other activities to mitigate hazard impacts on the City of Covington.

PLANNING METHODOLOGY

Development of the hazard mitigation plan included five phases:

- **Phase 1, Organize Resources**—In Phase 1, a nine-member steering committee was assembled to oversee development of the plan. The committee includes City staff, citizens and other stakeholders. Technical support to the steering committee was provided by a planning team consisting of key City staff and a technical consultant. Coordination with other local, state and federal agencies involved in hazard mitigation occurred from the outset of this plan’s development through its completion. A multi-media public involvement strategy centered on a hazard preparedness questionnaire was also implemented under this phase. Also occurring under this phase was a comprehensive review of the State Hazard Mitigation Plan and of existing City programs that may support or enhance hazard mitigation measures.
- **Phase 2 , Perform the Risk Assessment**—Risk assessment is a way to measure potential loss of life, personal injury, economic loss, and property damage resulting from natural hazards. This process encompasses the following steps:
 - Hazard identification and profiling
 - Evaluation of the impact of hazards on physical, social and economic assets
 - Vulnerability identification
 - Estimates of the cost of damage or costs that can be avoided through mitigation.
 - The risk assessment for this hazard mitigation plan occurred simultaneously with Phase 1 activities, with the two efforts using information generated by one another to create the best possible risk assessment.
- **Phase 3, Engage the Public**—A public involvement strategy developed by the Steering Committee and implemented by the Planning Team included the following:
 - A public meeting early in the plan process

- A public meeting to review the draft plan
- A hazard mitigation survey
- A City-sponsored website dedicated to the planning process
- Multiple media releases throughout the process.
- **Phase 4, Assemble the Plan**—The planning team and steering committee assembled key information from Phases 1 and 2 into a document to meet DMA requirements. Federal regulations require that a local hazard mitigation plan include the following:
 - A description of the planning process
 - Risk assessment
 - A mitigation strategy defining goals, reviewing alternative mitigation approaches, and outlining a prioritized action plan
 - A strategy for maintaining the hazard mitigation plan
 - Documentation of adoption.
- **Phase 5, Plan Adoption/Implementation**—Final adoption of the hazard mitigation plan will follow pre-adoption approval by both Washington’s Emergency Management Division and the Federal Emergency Management Agency (FEMA) Region X. This plan’s strategy for implementation and maintenance details the formal process for ensuring that the plan remains an active and relevant document. The plan maintenance process includes a schedule for monitoring and evaluating the plan’s progress annually and producing a plan revision every five years. This process seeks to keep a steering body that meets the criteria of the original steering committee intact to perform this annual review. Implementation will include continued public involvement and incorporation of the plan recommendations into other City planning mechanisms, such as the comprehensive plan, capital improvement plan, municipal code, and stormwater management plan.

MITIGATION GUIDING PRINCIPLE, GOALS AND OBJECTIVES

The following guiding principle guided the Steering Committee in selecting mitigation actions contained in this plan:

Leverage partnerships and available resources and mitigate known risks to preserve the quality of life within the City of Covington.

The following goals were identified to help achieve the guiding principle:

1. Protect life and property.
2. Maintain economic viability during and after a hazard event.
3. Maintain, enhance and restore the natural environment’s capacity to deal with impacts of natural hazard events.
4. Promote the development and implementation of cost-effective hazard mitigation projects.
5. Increase the public’s awareness of the impacts from hazard events.
6. Improve the community’s emergency management capability.
7. Promote hazard-resilient development through the use of best available data and science.

Table ES-1 lists 12 objectives identified to be used in prioritizing actions identified by this plan.

**TABLE ES-1.
CITY OF COVINGTON HAZARD MITIGATION PLAN OBJECTIVES**

Objective Number	Objective Statement	Goals to Which It Can Be Applied
O-1	Educate the public on the risk from natural hazards and increase awareness, preparation, mitigation, response and recovery activities.	1, 4, 5, 6
O-2	Consider the use of incentives for hazard mitigation to minimize the impacts of natural hazards on current and future land uses.	1, 3, 5, 7
O-3	Establish a partnership among all levels of government and the business community to improve and implement methods to protect private property and delivery of services.	1, 2, 5, 6
O-4	Integrate hazard mitigation goals and policies into the City's Comprehensive Plan.	1, 3, 7
O-5	Create a public outreach strategy that informs the public on the risk exposure to natural hazards and ways to increase the public's capability to prepare for, respond to, recover from and mitigate the impacts of these events.	1, 5, 6
O-6	Pursue implementation of all feasible risk reduction measures that reduce the natural hazard risk exposure to both public and private property.	1, 4, 7
O-7	Use the best available data, science and technologies to improve understanding of the location and potential impacts of natural hazards, the vulnerability of building types and community development patterns and the measures needed to protect life safety and critical facilities.	1, 3, 7
O-8	Retrofit, purchase or relocate at-risk properties, based on one or more of the following criteria: level of exposure, repetitive loss history, and previous damage from natural hazards.	1, 3, 4, 7
O-9	Seek natural hazard mitigation projects that minimize or mitigate their impacts on the environment.	1, 3, 7
O-10	Strengthen codes, land use planning and their enforcement, so that developments avoid or withstand the impacts of natural hazards.	1, 6, 7
O-11	Maintain and restore critical functions of identified critical facilities through proactive planning.	1, 2, 6
O-12	Seek ways to improve emergency management capacity and capability within the whole community.	1, 5, 6

MITIGATION INITIATIVES

The hazard mitigation action plan was developed based on an assessment of the capabilities of the City to implement hazard mitigation initiatives and a review of alternatives. Although grant funding eligibility was one consideration in development of this plan, not all identified mitigation actions are grant-eligible. The focus for some initiatives is their effectiveness in achieving the goals of the plan and whether they are within the City's capabilities. Table ES-2 presents a summary of the hazard mitigation initiatives identified by this plan and their priority.

**TABLE ES-2.
SUMMARY OF HAZARD MITIGATION INITIATIVES**

Initiative #	Description	Priority
C-1	Work with FEMA to get the City of Covington converted to the regular phase of the National Flood Insurance Program. Once this takes place, the City will continue to maintain compliance and good standing under the National Flood Insurance Program. This will be accomplished through the implementation of floodplain management programs that, at a minimum, will meet the minimum requirements of the National Flood Insurance Program, which include the following: <ul style="list-style-type: none"> • Enforcement of the adopted flood damage prevention ordinance • Participating in floodplain identification and mapping updates • Providing public assistance/information on floodplain requirements and impacts. 	High
C-2	Evaluate flooding potential of publicly owned culverts and prioritize for replacement within the capital improvement program. Pursue grant funding for culvert replacements that are feasible and cost-effective to leverage available city funding.	High
C-3	Identify and evaluate privately owned culverts that contribute, or could contribute, to flooding. Pursue grant funding for culvert replacements that are feasible and cost-effective to leverage available city funding.	High
C-4	Strategize a program of regulations and/or incentives for owners to replace flood-contributing culverts.	Medium
C-5	Conduct a hazardous tree assessment and develop a plan to remove hazardous trees on all city-owned property.	Medium
C-6	Remove hazardous trees on city-owned property.	Medium
C-7	Actively promote and raise awareness of the Community Emergency Response Team training program to staff, council and citizens.	High
C-8	Evaluate the feasibility and interest level of a sub-regional emergency coordinator to serve southeast King County cities and utility districts.	Medium
C-9	If feasible, acquire a sub-regional emergency coordinator position.	Medium
C-10	Conduct a feasibility study for a sub-regional Emergency Coordination Center.	Low
C-11	Evaluate the current Surface Water Management utility rates and establish funding levels for surface water capital projects and operation and maintenance programs.	High
C-12	Partner with utility districts (Covington Water District, Soos Creek Water and Sewer District) on emergency response and continuity of operation plans.	High
C-13	Survey and delineate the floodplain of Little Soos Creek to identify known and potential flood limits.	Medium
C-14	Update Comprehensive Emergency Management Plan and include terrorism and catastrophic events.	High
C-15	Establish an accessible backup fuel supply to maintain emergency power during long-term power disruptions caused by all hazards of concern	Medium
C-16	Acquire a backup mobile emergency 30-KW generator for warming shelters, emergency triage, hospital, etc.	Medium
C-17	Establish linkage between comprehensive plan and hazard mitigation plan.	High
C-18	Rehabilitate and restore drainage facilities back to designed capacities.	Medium

**TABLE ES-2.
SUMMARY OF HAZARD MITIGATION INITIATIVES**

Initiative #	Description	Priority
C-19	Design and construct the Woodlands drainage project to mitigate erosion and groundwater seepage.	High
C-20	Conduct a drainage study for the 204th Avenue SE corridor.	Low
C-21	Design and retrofit the regional stormwater facility (The Reserve) to increase storage capacity and stability from seismic events.	Low
C-22	Design and construct the Clements drainage pipe upgrade to increase capacity.	Medium
C-23	Design and construct Emerald Downs open space channel rehabilitation.	Medium
C-24	Expand the City's existing 800 MHz radio communication system.	Medium
C-25	Acquire property to stockpile bulk response materials.	Low
C-26	Design and construct Jenkins Creek Park bridge and pedestrian path resistant to future flooding.	High
C-27	Establish mutual aid agreements with local agencies for equipment, materials and supplies.	Medium
C-28	Establish an emergency on call contract with a general contractor to provide assistance with equipment and operators.	High
C-29	Reach out to vulnerable populations (adult family homes, senior apartments) and identify plans to track needs during an emergency.	High
C-30	Improve the maintenance facility to enable use as backup emergency coordination center and City datacenter. <ul style="list-style-type: none"> • Provide redundant high speed internet connections with static IP addresses • Improve firewall to handle redundancy • Upgrade server capability in order to run critical city systems. 	Medium
C-31	Improve data connectivity and redundancy at City Hall to make it more resilient to disruption. <ul style="list-style-type: none"> • Provide redundant network attached storage to provide failover • Provide redundant high-speed internet connections with static IP addresses. 	Medium
C-32	Use cloud services to provide for out-of-area storage of City data. <ul style="list-style-type: none"> • Provide automated duplication of backup data to a cloud storage provider • Create ability to restore data directly from the cloud copy. 	Medium
C-33	Use cloud services to provide continuity of service for critical city software systems in the event of an emergency. <ul style="list-style-type: none"> • Provide automated copying of critical systems to a cloud provider • Create the ability to turn on the cloud copy of critical systems in the event on-premise systems were down. 	Medium
C-34	Evaluate geographic information technology needs related to emergency management. <ul style="list-style-type: none"> • Purchase Spatial Analyst in order to run the HAZUS model • Purchase ArcServer to host dynamic web maps relating to emergency management. 	Medium
C-35	Partner with local homeowners associations and block watch groups to provide training and coordination for ATC 20-21 (rapid visual inspection of disaster-damaged buildings) and disaster preparedness.	Low
C-36	Update and work on improvements to the City's emergency permitting process.	Medium

**TABLE ES-2.
SUMMARY OF HAZARD MITIGATION INITIATIVES**

Initiative #	Description	Priority
C-37	Provide Community Emergency Response Team training to all city staff.	High
C-38	Provide ATC 20-21 (rapid visual inspection of disaster-damaged buildings) to all city staff, particularly the field staff.	Low
C-39	Use information and principles identified in this plan to support other planning initiatives in Covington, including development and redevelopment plans.	Medium
C-40	Seek opportunities to retrofit vulnerable structures when information identifies them as being a risk to hazards.	Low

IMPLEMENTATION

The Covington City Council will assume responsibility for committing City resources toward implementation of this plan. The plan identifies a strategy that maximizes the potential for implementation based on available and potential resources. It commits the City to pursue initiatives when the benefits of a project exceed its costs. The City used public input through all phases of plan development, which will set the stage for successful implementation of the recommended actions.

Full implementation of the recommendations of this plan will require time and resources. Protocols are provided to evaluate changes in hazard vulnerability and action plan priority after the plan has been adopted. Funding resources and programs are always evolving, based on new state or federal mandates. The true measure of the plan’s success will be its ability to adapt to the ever-changing climate of hazard mitigation.